MEMORANDUM

TO: Central Office, District Offices and Regional Centers

FROM: Kathi K. Lacy Kathi K. Lacy

Associate State Director, Policy

RE: 300-06-DD Directive

DATE: July 21, 2009

The South Carolina Department of Disabilities and Special Needs (DDSN) recently circulated Departmental Directive 300-06-DD for comment with an effective date of June 30, 2009. Please reference the table below for the number, name and status of the directive which is now published on DDSN's website at www.ddsn.sc.gov

Reference #	Directive Title	Status	Applicability
300-06-DD	Emergency Management Systems Operation and Parameters	No Revisions	Central Office, Regional Centers and District Officers

Please be aware of the following important areas of change or reemphasis:

The directive has been reviewed by staff and no changes to body of the directive have been made.

If you have any questions please email me at twaring@ddsn.sc.gov or call 803-898-9792.

Reference Number: 300-06-DD

Title of Document: Energy Management Systems Operations and Parameters

Date of Issue: February 12, 1998 Effective Date: February 12, 1998

Last Review Date: April 8, 2009 (No Revisions)

Date of Last Revision: April 8, 2009

Applicability: DSN Facilities

1. <u>Purpose</u>:

Energy management systems installed in regional residential centers or individual buildings are intended to regulate heating/ cooling requirements in buildings to provide optimum indoor comfort levels while achieving cost savings through management of energy demands. Energy management systems have been installed at all regional centers and have the capability to control individual HVAC equipment as well as other energy management techniques for conservation of energy. The intent of this policy is to set parameters for controlling building heating and cooling within approved and acceptable limits. It is the intent of this policy to prescribe energy management measures in nonresidential buildings. Residential buildings should maintain optimum temperatures 24 hours per day. Residential buildings shall be monitored only and have optimum temperature set limits controlled by the energy management system. Individual buildings may require adjustments based on the needs of the individuals living there. To achieve the goals of energy management while maintaining an indoor environment at acceptable comfort levels, the operations guidelines contained in this directive are to be enacted.

2. Definitions:

1. Acceptable Temperature Limits:

The ranges of indoor temperatures for heating and cooling seasons which are considered acceptable for habitation in the workplace. For the heating season the acceptable temperature limits are 68 degrees Fahrenheit to 74 degrees Fahrenheit. For the cooling season the acceptable temperature limits are 70 degrees Fahrenheit to 76 degrees Fahrenheit.

2. Non-Residential:

Any building not used for living, eating & sleeping. Buildings used for programs, education, recreation, office, and other support activities are considered non-residential.

3. Optimal Start:

The time at which the energy management system switches from night set-back to normal operational mode in order to heat or cool the building to the set temperature one-half hour before normal business hours. The energy management system uses the outdoor temperature to compute the "optimal" start time.

4. Residential:

A building is considered residential when it is used primarily for living, eating & sleeping. For the purposes of energy management, an infirmary, or hospital is considered residential.

3. <u>Procedure</u>:

- A. Setback Temperature Limits All non-residential buildings shall have temperature limits modified during nighttime, weekend, and holiday hours of non-use. Setback temperature limits shall be 55 degrees fahrenheit (60 degrees fahrenheit for heat pump systems) during the heating season and 85 degrees fahrenheit during the cooling season. Portions of non-residential buildings used 24 hours per day may be exempted from the setback requirement.
- B. Daytime Temperature Limits All non-residential buildings shall maintain indoor temperatures between 68 degrees fahrenheit and 74 degrees fahrenheit for heating season and between 70 degrees fahrenheit and 76 degrees fahrenheit for cooling season.
- C. Optimal Start The energy management system shall utilize the "optimal" start time sequences established using outdoor temperature reading. The energy management system, for non-residential buildings, shall be programmed so that the "optimal" start for heating or cooling will bring the indoor temperature to the set limit one-half hour prior to normal business hours.
- D. The un-authorized use of portable electric heaters is prohibited. Use of electric supplemental heaters shall be approved only as outlined in Article 4.C.

4. <u>Exceptions</u>:

A. Residential Buildings - The energy management system is to be utilized to "monitor" indoor temperature in all residential and health care buildings, and to control temperature set points at appropriate limits. The use of the energy management system in these buildings will limit temperature extremes caused by inappropriate use of building thermostats.

- B. Inappropriately Placed Sensors In some buildings, sensors may be so located as to not accurately represent the ambient temperature of the area served by HVAC equipment. Air temperature should be checked in several locations throughout the service area to determine the "actual" ambient temperature. Set points for these specific sensor locations may be adjusted above or below the "acceptable" limits of this policy. This should be done on a case-by-case basis for a specific problem. Should large differences be encountered, consideration should be given to relocating the sensors to a more representative location. Temperature settings for non-residential buildings that are outside of the acceptable temperature limits shall be documented as to the reason for the variation, and shall be approved by the Director of Physical Plant.
- C. Chronic Temperature Differences Buildings or portions of buildings with substantial variance from acceptable temperature limits shall be investigated for possible blockage of air flow or other problems with the HVAC system. The Division of Engineering and Planning is available to assist with troubleshooting equipment and design problems. Auxiliary equipment such as fans and electric heaters may be used as a temporary measure in areas of chronic temperature differences but use of such equipment must be reviewed by the Director of Physical Plant and approved on a case-by-case basis. Use of such equipment should be for a limited period of time until a permanent correction of the HVAC system is completed.

Robert W. Barfield Deputy State Director Administration (Originator) Eugene A. Laurent, Ph.D. State Director (Approved)